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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/790,697	03/03/2004	Yasusuke Iwashita	392.1879	4331
21171	7590	08/23/2005	EXAMINER	
STAAS & HALSEY LLP SUITE 700 1201 NEW YORK AVENUE, N.W. WASHINGTON, DC 20005			SMITH, TYRONE W	
			ART UNIT	PAPER NUMBER
			2837	

DATE MAILED: 08/23/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

SP

Office Action Summary	Application No. 10/790,697	Applicant(s) IWASHITA ET AL.	
	Examiner Tyrone W. Smith	Art Unit 2837	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10 June 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-17 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-5, 9-12, 16 and 17 is/are rejected.
- 7) ☒ Claim(s) 6-8 and 13-15 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>8/10/05</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1, 2, 5, 9, 12, 16 and 17 rejected under 35 U.S.C. 102(b) as being anticipated by Maezawa et al (6333615).

Regarding Claims 1, 16 and 17. Maezawa discloses a synchronization control device for servo motors which includes a position control unit (column 23 lines 12-16) for outputting velocity commands at each predetermined cycle on the basis of the position deviation between position feedback from a position detector (Figure 2 items 15 and 25) and position command (Figure 2 items SWA1 and SWA2) transmitted at each predetermined sampling cycle from a host control device or a host control unit and a velocity control unit (column 23 lines 17-20) for outputting torque commands at each predetermined cycle on the basis of velocity feedback from velocity detectors (Figure 2 items 17 and 27) and the velocity commands from the position control unit (column 23 lines 12-16), wherein the synchronous control device (Figure 1 items 16 and 26) synchronously controls two servomotors (Figure 1 items 14 and 24; Figure 2 items 14 and 24) for driving the same control object (Figure 1 item 1) and further comprises means for reducing the force that acts between the two servomotors on the basis of the force that acts between the two servomotors (abstract; Figure 13).

Regarding Claims 2, 5, 9 and 12. Maezawa discloses a position deviation offset calculation processor for calculating the offset amount of the position deviation on the basis of

the force that acts between the two servomotors, and means for adding the position deviation offset amount calculated by the position deviation offset calculation processor to the position deviation (column 23 lines 24-42).

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 3, 4, 10 and 11 rejected under 35 U.S.C. 103(a) as being unpatentable over Maezawa et al (6333615) in view of Okada (JP04-065701).

Regarding Claims 3, 4, 10 and 11. Maezawa discloses a synchronization control device for servo motors which includes a position control unit (column 23 lines 12-16) for outputting velocity commands at each predetermined cycle on the basis of the position deviation between position feedback from a position detector (Figure 2 items 15 and 25) and position command (Figure 2 items SWA1 and SWA2) transmitted at each predetermined sampling cycle from a host control device or a host control unit and a velocity control unit (column 23 lines 17-20) for outputting torque commands at each predetermined cycle on the basis of velocity feedback from velocity detectors (Figure 2 items 17 and 27) and the velocity commands from the position control unit (column 23 lines 12-16), wherein the synchronous control device (Figure 1 items 16 and 26) synchronously controls two servomotors (Figure 1 items 14 and 24; Figure 2 items 14 and 24) for driving the same control object (Figure 1 item 1) and further comprises means for reducing the force that acts between the two servomotors on the basis of the force that acts between the two servomotors (abstract; Figure 13). However, Maezawa discloses a position

deviation offset calculation processor computes the force that acts between the two servomotors from the difference in the torque commands given to the two servomotors, and calculates the position deviation offset amount by multiplying the computed difference by a conversion coefficient.

Okada discloses a method for synchronously interlocking feed shaft of applied board which includes a position deviation offset calculation processor (Figure 2) computes the force that acts between the two servomotors (Figure 1 item 14 and 24) from the difference in the torque commands (Figure 2) given to the two servomotors (Figure 1 item 14 and 24), and calculates the position deviation offset amount by multiplying the computed difference by a conversion coefficient (abstract).

It would have been obvious to one of ordinary skill in the art at the time of invention to use Maezawa's a synchronization control device for servo motors with the Okada's a method for synchronously interlocking feed shaft of applied board. The advantage of combining the two would provide a a system that prevents working accuracy from being reduced by detecting the torque difference of the two servo motors.

Allowable Subject Matter

5. Claims 6-8 and 13-15 objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Response to Arguments

6. Applicant's arguments with respect to claims 1-17 have been considered but are moot in view of the new ground(s) of rejection.

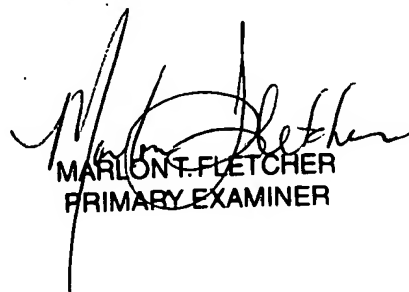
7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tyrone W. Smith whose telephone number is 571-272-2075. The examiner can normally be reached on weekdays from 8:30am to 5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Martin, can be reached on 571-272-2800 ext. 37. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Tyrone Smith
Patent Examiner

Art Unit 2837



MARLONT.FLETCHER
PRIMARY EXAMINER